

WHAT IS CLAIMED IS:

1. A system for making wireless communication processing between a wireless base station and an arbitrary wireless terminal apparatus, said system comprising:

5 a wireless communication apparatus for a base station, the apparatus including a plurality of antenna bodies each having a directional pattern in a predetermined direction; and

 a wireless terminal apparatus, to become a communication target, that is capable of making wireless communication with said
10 wireless communication apparatus for the base station,

 wherein said wireless communication apparatus for the base station performs:

 identification processing of the communication-targeted wireless terminal apparatus located within a communication area of
15 each of the directional patterns of said antenna bodies regularly or irregularly;

 storage processing of a correspondence relationship between said communication-targeted wireless terminal apparatus and each of said antenna bodies; and

20 at the time of making wireless communication, selection processing of the antenna body which corresponds to the pertinent wireless terminal apparatus based on the storage processing.

2. The wireless communication system according to claim 1,

25 wherein said wireless communication apparatus for the base station at least comprises:

a plurality of antenna bodies each having a directional pattern in a predetermined direction; and

a controller for allowing identifying the communication-targeted wireless terminal apparatus located within the communication area created by each of the directional patterns of said antenna bodies, and recognizing the correspondence relationship between the pertinent communication-targeted wireless terminal apparatus and each of said antenna bodies,

wherein said controller performs:

at the time of making wireless communication, selection processing of the antenna body which corresponds to the pertinent wireless terminal apparatus, and

communication processing with the wireless terminal apparatus located within the communication area created by the pertinent directional pattern, using said selected antenna body.

3. The wireless communication system according to claim 1, wherein said communication-targeted wireless terminal apparatus is located within the communication area created by the predetermined directional pattern of said wireless communication apparatus for the base station, or said communication-targeted wireless terminal apparatus moves between the communication areas of these pertinent directional patterns.

4. The wireless communication system according to claim 1,

wherein said wireless communication apparatus for the base station comprises storing means for storing antenna selection information indicative of the correspondence relationship between said communication-targeted wireless terminal apparatus and each of
5 said antenna bodies.

5. The wireless communication system according to claim 1,
wherein said wireless communication apparatus performs a memory control over said storing means to update said antenna selection
10 information.

6. The wireless communication system according to claim 1,
wherein said wireless communication apparatus regularly or irregularly transmits data for confirming the communication area to
15 said communication-targeted wireless terminal apparatus.

7. The wireless communication system according to claim 1,
wherein said wireless communication apparatus for the base station comprises at least two antenna bodies having different
20 directional patterns from each other, and

wherein said wireless communication apparatus transmits a reference signal to the communication-targeted wireless terminal apparatus within the communication area created by the pertinent directional pattern from both of said antenna bodies alternately.

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8. The wireless communication system according to claim 1,

wherein said wireless communication apparatus for the base station perform scan processing of inputs of said antenna bodies and waits for receiving data, except for the time of making the wireless transmission, and

5 wherein said wireless communication apparatus for the base station receives the data using the antenna body that receives the strongest radio wave from said communication-targeted wireless terminal apparatus.

10 9. A wireless communication apparatus for arbitrarily making wireless communication with a wireless terminal apparatus, to become a communication target, said apparatus comprising:

 a plurality of antenna bodies each having a directional pattern in a predetermined direction; and

15 a controller for allowing identifying a communication-targeted wireless terminal apparatus located within a communication area created by each of the directional patterns of said antenna bodies, and recognizing a correspondence relationship between the pertinent communication-targeted wireless terminal apparatus and each of said
20 antenna bodies,

 wherein said controller performs:

 at the time of making wireless communication, selection processing of the antenna body which corresponds to the pertinent wireless terminal apparatus; and

communication processing with the wireless terminal apparatus located within the pertinent directivity using said selected antenna body.

5 10. The wireless communication apparatus according to claim 9, comprising storing means for storing antenna selection information indicative of the correspondence relationship between said communication-targeted wireless terminal apparatus and each of said antenna bodies.

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11. The wireless communication apparatus according to claim 9,

wherein said controller performs a memory control over said storing means to update said antenna selection information.

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12. The wireless communication apparatus according to claim 9,

wherein said controller regularly or irregularly transmits data for confirming the communication area to said communication-targeted wireless terminal apparatus.

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13. The wireless communication apparatus according to claim 9, comprising said antenna bodies of at least two having different directional patterns from each other,

wherein the controller allows transmitting a reference signal to the communication-targeted wireless terminal apparatus within the pertinent directivity from both of said antenna bodies alternately.

5 14. The wireless communication apparatus according to claim 9,

wherein said controller performs scan processing of inputs of said antenna bodies and waits for receiving data, except for the time of making the wireless transmission, and

10 wherein the controller receives the data using the antenna body that receives the strongest radio wave from said communication-targeted wireless terminal apparatus.

15 15. A method for arbitrarily making wireless communication with a wireless terminal apparatus, to become a communication-target, said method comprising the steps of:

providing a plurality of antenna bodies each having a directional pattern in a predetermined direction to a wireless communication apparatus for a base station, and preparing the
20 communication-targeted wireless terminal apparatus which is capable of wireless communication within a communication area created by the arbitrary directional pattern;

in said wireless communication apparatus for the base station,
regularly or irregularly identifying the
25 communication-targeted wireless terminal apparatus located

within a communication area created by each of the directional patterns of said antenna bodies;

storing a correspondence relationship between said identified communication-targeted wireless terminal apparatus and each of said antenna bodies;

at the time of making wireless communication, selecting the antenna body which corresponds to the pertinent wireless terminal apparatus; and

performing communication processing with the wireless terminal apparatus located within the pertinent directivity using said selected antenna body.

16. The wireless communication method according to claim 15, comprising the steps of locating said communication-targeted wireless terminal apparatus within the communication area created by the predetermined directional pattern of said wireless communication apparatus for a base station, or allowing said communication-targeted wireless terminal apparatus to move between the communication areas created by these directional patterns.

17. The wireless communication method according to claim 15, comprising the step of creating antenna selection information indicative of the correspondence relationship between said communication-targeted wireless terminal apparatus and each of said antenna bodies.

18. The wireless communication method according to claim 15,
comprising the step of updating said antenna selection information.

19. The wireless communication method according to claim 15,
5 comprising the step of regularly or irregularly transmitting data for
confirming the communication area to said communication-targeted
wireless terminal apparatus.

20. The wireless communication method according to claim 15,
10 further comprising the steps of:

providing said antenna bodies of at least two having different
directivities from each other; and

transmitting a reference signal through both of said antenna
bodies to the communication-targeted wireless terminal apparatus
15 within the pertinent directivity alternately.

21. The wireless communication method according to claim 15,
comprising the steps of:

except for the time of making the wireless transmission,
20 performing scan processing of inputs of said antenna bodies
and waiting for receiving data; and

receiving the data using the antenna body that receives the
strongest radio wave from said communication-targeted wireless
terminal apparatus.